

Winter Surface Temperature Anomalies in Japan and East Asian
Atmospheric Circulation Patterns Associated with ENSO

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It is known that the surface temperature in winter in Japan tends to be above normal during ENSO warm episode (Halpert and Ropelewski 1992). However, it is not clear what mechanism contributes warmer than normal winter in Japan. Therefore, we investigated circulation patterns over East Asia associated with ENSO. It is clarified that low-level temperature advection by low level high pressure pattern associated with negative precipitation anomalies in the tropical western pacific during warm episode is important in the late winter (Wang et al. 2000). On the other hands, barotropic Rossby wave propagation from South China to Japan is also important in early winter in addition to the mechanism mentioned above. As a result, the tendency of temperature to be above normal in Japan is more evident in the early winter than in the late winter.